

Plant and Equipment Expenditures: Year 1980

BUSINESS plans to spend \$195.7 billion for new plant and equipment in 1980, 10.9 percent more than in 1979, according to the survey conducted in late November and December (table 1). This is the first BEA survey that covers the year 1980. Estimated 1979 spending, based on the survey conducted a month earlier, is \$176.4 billion, 14.7 percent more than in 1978.¹

These data are not adjusted for price change. The implicit price deflator for the nonresidential fixed investment component of GNP increased 8½ percent in 1979. Survey respondents reported that prices of capital goods

purchased by them increased 9½ percent in 1979; they expect capital goods

1. For estimates of prior years, see pages 26-40 of "Revised Estimates of New Plant and Equipment Expenditures, 1947-69: Part I" in the January 1970 Survey of Current Business and the March 1970, 1972, 1974, 1976, and 1978 Survey issues.

The estimate for 1979 is based on actual expenditures in the first three quarters and plans for the fourth quarter. The plans were adjusted for systematic biases by procedures described on pages 30-33 of the February 1979 Survey.

The 1980 plans also were adjusted for systematic biases. Before adjustment, plans were \$20.12 billion for manufacturing and \$206.80 billion for nonmanufacturing; the net effect of the adjustments was to lower manufacturing \$0.61 billion and to raise nonmanufacturing \$0.26 billion. The bias adjustments, which are computed separately for each major industry, were applied only when plans deviated from actual spending in the same direction for 5 of the last 7 years. In those cases, the adjustment used was the median deviation between actual and planned spending in the last 5 years.

prices to increase 10 percent in 1980 (table 2).² This information indicates that real spending increased 4¼-5½ percent in 1979 and implies an increase in planned real spending in 1980 of 1-2 percent.

For the 10 years that the November-December surveys have been taken, actual year-to-year changes in spending have deviated from planned changes by less than 1½ percentage points in 6 of these years (chart 9). Plans significantly overstated the spending increases in the recession years 1970 and 1975—3.8 and 4.3 percentage points, respectively. In 1978 and 1979, plans understated increases by 2.6 and 3.5 percentage points. There are many uncertainties about the economic outlook for 1980,

Table 1.—Expenditures for New Plant and Equipment by U.S. Business¹

	1978	1979 ²	1980 ³	1979-78	1980-79
	Billions of dollars		Percent change		
All industries.....	153.52	176.37	195.67	14.7	10.9
Manufacturing.....	57.62	75.30	89.51	15.4	14.3
Durable goods.....	31.65	37.89	43.76	18.7	16.5
Primary metals ⁴	5.87	6.94	7.92	11.4	15.0
Blast furnaces, steel works.....	2.46	2.80	3.39	17.6	10.1
Nonferrous metals.....	2.46	2.83	2.90	7.6	13.4
Electrical machinery.....	8.08	9.08	9.95	10.8	10.8
Machinery, except electrical.....	0.29	1.15	0.82	29.4	18.0
Transportation equipment ⁵	0.48	7.28	8.70	21.9	12.7
Motor vehicles.....	4.05	6.38	5.78	15.6	7.2
Aircraft ⁶	1.81	2.14	2.70	11.8	28.0
Buses, trucks, and trailers.....	2.46	2.28	2.29	10.9	14.5
Other durables ⁷	0.05	7.43	8.45	12.4	13.5
Non-durable goods.....	35.96	40.41	45.74	12.4	13.2
Food (including beverages).....	4.87	5.08	5.41	4.3	6.4
Textiles.....	1.04	1.03	1.15	-0.9	14.0
Paper.....	3.45	4.84	5.00	39.5	22.2
Chemicals.....	7.10	8.41	9.06	18.4	8.0
Petroleum.....	15.50	15.47	10.07	0.3	15.8
Rubber.....	1.75	1.80	2.03	6.4	9.2
Other non-durables ⁸	2.24	2.72	3.02	21.7	11.1
Nonmanufacturing.....	86.19	99.97	106.16	12.9	6.0
Mining.....	4.78	5.42	6.40	15.0	18.6
Railroad.....	2.22	2.88	4.40	17.0	15.1
Air transportation.....	2.30	3.44	3.44	44.8	0.0
Other transportation.....	2.43	2.07	3.41	22.3	14.6
Public utilities.....	20.48	23.18	24.80	12.0	7.0
Electric.....	24.78	28.10	29.23	13.7	3.7
Gas and other.....	4.70	4.90	5.57	0.3	13.5
Communication, commercial and other ⁹	43.87	40.17	54.07	12.1	10.0

¹ Preliminary.

² Excludes agricultural business; real estate; medical, legal, educational, and cultural services; and nonprofit organizations.

³ Planned capital expenditures reported by business in late November and December 1979. Plans have been adjusted for biases.

⁴ Includes industries not shown separately.

⁵ Includes guided missiles and space vehicles.

⁶ Consists of fabricated metal, lumber, furniture, instruments, and miscellaneous.

⁷ Consists of apparel, tobacco, leather, and printing-publishing.

⁸ Includes trade, service, construction, finance, and insurance.

2. Respondents were asked:

"What are your best estimates of average price changes from 1978 to 1979 and expected price changes from 1979 to 1980?"

"a. Prices paid by your company for new construction, machinery, and equipment."

"b. Prices of goods and/or services sold by your company."

Similar information was obtained in the corresponding annual surveys conducted since 1970. The companies' responses on capital goods and sales price changes were weighted by their reported capital expenditures and sales, respectively.

Table 2.—Change in Prices of Capital Goods Purchased

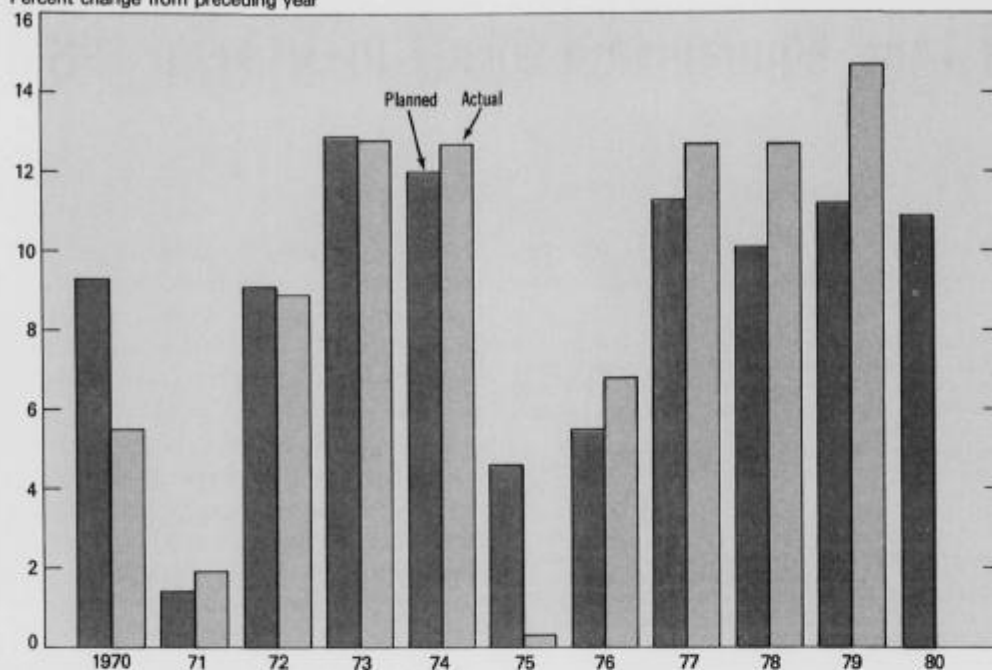
(Percent change from preceding year)

	Reported in Nov.-Dec. 1978 survey		Reported in Nov.-Dec. 1979 survey	
	Actual 1978	Expected 1979	Actual 1979	Expected 1980
All industries.....	8.0	8.1	0.5	9.1
Manufacturing.....	8.4	8.3	10.0	10.3
Durable goods.....	8.5	8.5	10.3	10.6
Non-durable goods.....	8.4	8.1	0.3	10.1
Nonmanufacturing.....	7.7	7.9	9.2	9.5
Mining.....	10.6	10.7	12.0	13.1
Transportation.....	8.3	8.4	12.2	12.4
Public utilities.....	7.8	7.8	0.3	9.4
Communication, commercial, and other.....	7.1	7.0	8.2	8.0

CHART 9 Table 3.—Percent Change in Business Sales¹

Planned and Actual Capital Spending

Percent change from preceding year



Note.—Planned spending estimates from November-December surveys.
 Estimate of 1979 actual spending is preliminary.

U.S. Department of Commerce, Bureau of Economic Analysis

and it is not known to what extent these uncertainties are reflected in investment plans. However, if there were a recession in 1980, as is quite possible, investment plans would probably be scaled down.

Manufacturing industries plan spending of \$89.5 billion, 14½ percent more than in 1979; the 1979 increase was 16 percent. All major manufacturing industries plan increases in 1980. The largest increases are planned by aircraft, 29 percent; paper, 23 percent; and electrical machinery, 20 percent. Increases between 16 and 18 percent are planned by nonelectrical machinery, iron and steel, and petroleum. Increases between 13 and 15 percent are planned by textiles, stone-clay-glass, nonferrous metals, and "other durables." The year-to-year changes in investment programs of nonferrous metals, textiles, and petroleum show more strength than last year; changes in the programs of the machinery and transportation groups, paper, chemicals, and "other nondurables" show less strength.

Nonmanufacturing industries plan spending of \$106.2 billion, 8½ percent more than in 1979; last year, their spending increased 14 percent. All nonmanufacturing industries except mining plan smaller increases this year than last. The largest increases for 1980 are planned by mining, 17 percent; "other transportation," 14½ percent; and railroads, 13 percent. The "communications and commercial" group plans a 10-percent increase. Electric and gas utilities plan increases of 3½ percent; last year, electric utilities increased their spending almost 14 percent. Airlines plan a 3-percent increase; these firms increased spending more than 40 percent in 1978 and 1979.

Sales and sales prices

Manufacturers expect their sales to increase 10 percent in 1980 (table 3). The actual increase in 1979 was 13½ percent, compared with an expected increase of 10 percent reported at this time last year. Trade firms also expect an increase of 10 percent; last year, they had a 14-percent increase, compared with an expected 10½ percent.

Table 3.—Percent Change in Business Sales¹

	1979			1980
	Expected as reported in:		Actual	Expected as reported in Jan. 1980
	Jan. 1979	Mar. 1979		
Manufacturing	9.9	10.4	13.4	10.6
Durable goods ¹	10.6	10.6	12.1	9.2
Primary metals... ..	8.9	11.2	17.9	9.9
Electrical machinery.....	10.9	11.1	12.2	10.8
Machinery, except electrical.....	12.6	12.4	15.5	11.7
Transportation equipment.....	10.3	7.5	4.2	6.2
Stone, clay, and glass.....	7.5	6.5	10.2	6.4
Nondurable goods ¹	9.2	10.2	14.9	10.9
Food including beverage.....	9.4	10.2	11.0	9.9
Textiles.....	8.7	8.9	6.7	7.0
Paper.....	7.5	9.0	14.7	10.8
Chemicals.....	11.6	11.0	17.7	12.7
Petroleum.....	7.6	12.5	28.2	14.1
Rubber.....	7.4	10.1	12.5	10.4
Trade	10.6	9.5	14.0	10.0
Wholesale.....	9.6	9.6	17.1	8.7
Retail.....	11.5	9.4	11.0	11.2
Public utilities	11.0	10.2	17.2	16.0

1. Includes industries not shown separately.

Sources: Manufacturing data from Bureau of the Census, Current Industrial Reports, Series M-3, for first 11 months of 1979, and BEA estimates for December 1979. Trade data are from Bureau of the Census, Current Business Reports, Monthly Wholesale Trade and Monthly Retail Trade, and BEA estimates for December 1979. Public utility figures are estimated by BEA on basis of data collected in the annual business investment surveys.

Public utilities expect a 16-percent increase; they had a 17-percent increase in 1979, compared with an expected 11 percent.

Manufacturers expect the prices of their goods and services sold to increase 8½ percent this year, slightly less than the 9 percent they reported for last year; they had expected 6 percent last year (table 4). Public utilities expect an 11-percent increase, compared with 12 percent for last year; they had expected 8 percent last year.

Table 4.—Change in Prices of Products and Services Sold by Manufacturing and Utility Companies

[Percent change from preceding year]

	Reported in Nov.-Dec. 1978 survey		Reported in Nov.-Dec. 1979 survey	
	Actual 1978	Expected 1979	Actual 1979	Expected 1980
Manufacturing	6.4	6.2	9.2	8.5
Durable goods.....	6.7	6.3	7.5	7.8
Nondurable goods.....	6.1	6.0	11.1	9.3
Public utilities	9.1	7.8	12.1	11.2